[0100] If the player selected an option which includes interaction between the base layer and one or more "Z" layers, the controller **100** may modify the "Z" variable accordingly (e.g., Zflag-0001) (block **1820**). Similarly, if the player selected base layer interaction with more than one "Z" layer (block **1822**), the controller may modify the "Z" variable to reflect this player selection (e.g., Zflag=0011) (block **1824**). If the player also selected "Z" layer payouts (i.e., wins are possible from layer interaction) (block **1826**), the controller may further modify the "Z" variable accordingly (e.g., Zflag=0111) (block **1828**). Subsequently, the routine **485** exits.

[0101] FIGS. **19** is a more detailed flowchart of the "determine payout" routine **500** shown schematically in **FIG. 12**. The routine **500** may be embodied in a software program which is stored in the program memory **102** of a gaming unit **20** and executed by the microprocessor **104** in a well known manner. However, some or all of the blocks of the routine **500** may be performed manually and/or by another device. Although the routine **500** is described with reference to the flowchart illustrated in **FIG. 19, a** person of ordinary skill in the art will readily appreciate that many other methods of performing the acts associated with routine **500** may be used. For example, the order of many of the blocks may be changed without departing from the scope or spirit of the present invention. In addition, many of the blocks described are optional. Although this description focuses on a video slot machine, a person of ordinary skill in the art will readily appreciate that the teachings described herein may be applied to any type of gaming unit **20** without departing form the scope and spirit of the present invention.

[0102] The routine **500** begins when the video slot machine controller **100** selects one or more "Z" layer win evaluation methods based on the state of the "Z" variable. If no "Z" layer interaction types are selected by the player (e.g., Zflag=0000) (block **1930**), no "Z" layer win evaluation methods are used by the controller **100**. If the player selected base layer interaction with at least one "Z" layer (e.g., Zflag=0001) (block **1932**), the controller **100** selects a single "Z" layer win evaluation method (block **1934**), determines a single "Z" interaction style (block **1936**), and flags a special mode single layer "Z" evaluation code (block **1936**). In this manner, an appropriate evaluation routine may be selected for single "Z" layer interaction. The flagged win evaluation routine may determine what symbol combinations form predefined wins and award the associated prize(s).

[0103] If the player selected base game interaction with more than one "Z" layer (e.g., Zflag0011) (block **1938**), the controller **100** selects a multiple "Z" layer win evaluation method (block **1940**), determines a multiple "Z" interaction style (block **1942**), flags a special mode multiple layer "Z" evaluation code (block **1942**), and overrides the single layer "Z" evaluation code (block **1942**). In this manner, an appropriate evaluation routine may be selected for multiple "Z" layer interaction. The flagged win evaluation routine may determine what symbol combinations form predefined wins and award the associated prize(s). If the player also selected "Z" layer payouts (e.g., Zflag=0111) (block **1944**), the controller adds a "Z" layer win evaluation code to the current evaluation method (block **1946**).

[0104] Next, the controller **100** performs a win evaluation using either standard methods (i.e., one dimension) or extended methods (i.e., three dimensions) depending on the modes selected by the player (block **1950**). The game must always have a payout which is statistically provable and within predetermined limits (e.g., 90% return to player). Therefore, if player selections change the structure of the game, certain variables within the game must also change to keep the payout substantially constant.

[0105] Specifically, depending on the "Z" interaction, the game style and the game mode, the win evaluation process may select certain pay tables, reel strip layouts, and/or game rules from a plurality of preprogrammed pay tables, reel strip layouts, and/or game rules. Pay tables contain the credit values that can be won for a particular symbol combination. An exemplary pay table **2000** is illustrated in **FIG. 20**. Reel strip layouts determine game operation by defining the symbol combinations for the game. An exemplary reel strip layout **2100** is illustrated in **FIG. 21**. Letters **2102** and numbers **2104** in the reel strip layout **2100** represent various pictures and symbols which characterize the game. In this example, the "Z" symbol **2106** appears twice in the first reel, twice in the second reel, once in the third reel, once in the fourth reel, and once on the fifth reel. Of course, any number and combination of symbols may be used to control the overall return percentage of the game. The "Z" symbol **2106** may represent a free game, a bonus, an interaction with other layers, etc.). In addition, a person of ordinary skill in the art will readily appreciate that the reel strip layout **2100** may be linked to special modifier tables that have algorithmic rules attached. The pay table(s), **2000** reel strip layout(s) **2100**, and game rule(s) determine the games overall percentages return structure.

[0106] Many modifications to the pay table(s) **2000**, reel strip layout(s) **2100**, and game rule(s) which affect the overall percentages return structure of a game are well known. By adding a "Z" dimension, additional modifications to the pay table(s) **2000**, reel strip layout(s) **2100**, and game rule(s) which affect the overall percentages return structure of a game are provided. For example, each play layer may be evaluated separately using traditional methods, and then the individual results may be combined. In this embodiment, transparent overlays or "symbol within symbol" graphics may be used to present the layers to the player.

[0107] A flowchart illustrating one embodiment of this individual layer evaluation method **2200** is illustrated in **FIG. 22**. First, the controller **100** activates the base layer XY game and allows player interaction (block **2202**). For example, the player may change the number of pay lines, the number of credits to bet, or activate a layer via a user input device. The controller **100** then performs "normal" XY game evaluations and processes the results (block **2204**). For example, three of a kind (in this layer) might pay one hundred credits. Next, the controller **100** activates the "Z" layer XY game and allows player interaction (block **2206**). The controller **100** then performs additional "Z" evaluations and processes the results (block **2208**). For example, "Z" layer symbols may be combined with base layer symbols to create a pay line which crosses between the two layers Of course, a person of ordinary skill in the art will readily appreciate that more than two layers may be evaluated in this manner. The results of the individual determinations are then combined into one win statement which is presented to the player (block **2210**). For example, if the player won one